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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,732	12/21/2001	Peter Sladen	367.40991X00	5139
20457	7590	05/11/2004	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-9889			DUONG, THOI V	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 05/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/023,732	SLADEN, PETER	
	<b>Examiner</b>	<b>Art Unit</b>	
	Thoi V Duong	2871	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 ~~is/are~~ pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 ~~is/are~~ rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This office action is in response to the Request for Reconsideration After Final filed April 15, 2004.

Currently, claims 1-15 are pending in this application.

#### ***Response to Arguments***

2. Applicant's arguments with respect to the rejection(s) of claim(s) 1-15 under Umemoto et al. (JP 2001-215312) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kubo et al. (USPN 6,456,279 B1).

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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4. Claims 1, 2 and 7-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Kubo et al. (USPN 6,456,279 B1).

Re claims 1 and 7, as shown in Fig. 7, Kubo et al. discloses a display assembly comprising:

a display 1;

an illumination source 3; and

a display window 40 for placement in registration with the display so that the display is viewable through the window, wherein a first surface 40A of the window is for exposure to a user, and a second surface 40B of the window is for placement adjacent the display 1, the second surface being provided with an incorporated grating 8 (microprisms) for distributing light from the illumination source in the direction of the display (see also Fig. 8 and col. 10, lines 40-65).

Re claims 2 and 8, the display is a Liquid Crystal Display (LCD) (col. 9, lines 60-63).

Re claim 9, the illumination source 3 is disposed between the display window 40 and the display 1.

Re claim 10, the illumination source 3 is one or more Light Emitting Diodes (LEDs) (col. 12, lines 39-47).

Re claim 11, the LCD is operable in reflective mode (col. 3, lines 35-40).

Re claim 12, the grating 8 comprises a plurality of grooves as shown in Fig. 7.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kubo et al. (USPN 6,456,279 B1) in view of Brandt et al. (EP 1063561 A1).

Kubo et al. discloses a display window that is basically the same as that recited in claim 3 except that the grating does not comprise a plurality of triangular projections. As shown in the only figure, Brandt discloses a reflective liquid crystal display having a light deflecting element 7 comprising a plurality of triangular projections for deflecting the light that is laterally incident on a light inlet surface 2 in the direction of a liquid crystal cell 5 to improve display readability (see Abstract).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the display window of Kubo et al. with the teaching of Brandt by having the second surface provided with the grating comprising a plurality of triangular projections for guiding laterally incident light in the direction of liquid crystal cell to improve display readability (Abstract).

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kubo et al. (USPN 6,456,279 B1) in view of Li et al. USPN 6,504,582 B1).

Kubo et al. discloses a display window that is basically the same as that recited in claim 4 except for the first surface of the display window provided with a toughened

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coating. As shown in Fig. 1, Li et al. discloses a touch screen 12 coated with a scratch resistant layer 22 to minimize or prevent damage to the display (col. 3, lines 54-61).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the display window of Kubo et al. with the teaching of Li et al. by providing a toughened coating on the first surface of the display window so as to minimize or prevent damage to the display (col. 3, lines 54-61).

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kubo et al. (USPN 6,456,279 B1) in view of Sawai et al. (USPN 6,020,945).

Kubo et al. discloses a display window that is basically the same as that recited in claim 5 except for the first surface of the display window provided with an anti-reflective coating. As shown in Fig. 1, Sawai et al. discloses a transparent touch screen 12 comprising an operating section 10. Sawai et al. teaches that an anti-reflective coating is applied to the surface of the operating section to prevent the reflection of the external light in a visible range (col. 1, lines 52-61).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the display window of Kubo et al. with the teaching of Li et al. by providing an anti-reflective coating on the first surface of the display window to prevent the reflection of the external light in a visible range (col. 1, lines 52-61).

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kubo et al. (USPN 6,456,279 B1) in view of Arakawa (USPN 4,527,862).

Kubo et al. discloses a display window that is basically the same as that recited in claim 6 except for the display window comprising a polycarbonate material. As shown in Fig. 4, Arakawa discloses a liquid crystal display keyboard comprising a flexible transparent film 9 bonded on a transparent elastic film 8 for improving the durability of the keyboard (col. 2, lines 27-33). This flexible transparent film is made of polycarbonate (col. 2, lines 61-64).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the display window of Kubo et al. with the teaching of Arakawa by providing a flexible transparent film made of polycarbonate to improve the durability of the display (col. 2, lines 27-33).

10. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubo et al. (USPN 6,456,279 B1) in view of Imai (USPN 6,398,379 B1).

Kubo et al. also discloses that the display window is used in a portable information device (col. 8, lines 51-56). However, Kubo et al. does not disclose a housing of a portable telephone as recited in claims 13-15. As shown in Figs. 1- 4, Imai discloses a portable telephone comprising:

- a housing 24;

- a light source 4 and

- a display 12,

- wherein the housing is a front cover of the telephone; and

- wherein the housing comprises a window 26 which is integrally formed with the housing.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the housing of the telephone of Imai for the display assembly of Kubo et al. to reduce the component cost and assembly cost (col. 1, lines 28-30).


**Conclusion**

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (703) 308-3171. The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim, can be reached at (703) 305-3492.

Thoi Duong

05/04/2004

  
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